CYPR-CD02230 Patent

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0017] beginning on line 8 of page 9 with the following paragraph:

In one embodiment, the circuit is compensated by subtracting the output contribution from the second first MOSFET stage 220 [[210]] of the voltage-tocurrent converter portion of the circuit from the first second MOSFET stage 210 [[220]] portion of the circuit when both stages are active. Therefore, while the first MOSFET stage 210 portion continues to operate, it will remove the output current contributions of the second MOSFET stage 220 portion, via 248, effectively leaving the output current dependent only on the first MOSFET stage 210 portion. As the first MOSFET stage 210 portion reaches its maximum input voltage, additional increases in the input voltage no longer cause a proportional change in the first MOSFET stage 210 portion output current. In the embodiment shown in Fig. 2, this occurs when the first MOSFET stage 210 portion load resistor (R_P) consumes all the load bias current. Since no more bias current is available to source to MOSFET MI 240 and all further bias current increases due to the compensation circuit flow to the load resistor (R_p) , the output current due to the first MOSFET stage 210 portion of the circuit saturates and becomes entirely dependent on the second MOSFET stage 220 portion. The transition between the two portions is smooth since both use identical load resistors (R_P and R_N) (assuming no body effect), and the first MOSFET stage 210 portion "turns off', when all available current sourced to its load resistor (R_p) , with little device distortion (e.g., MOSFET's falling out of saturation).

2 Serial No.: 10/809,238 Examiner: Zweizig, J.